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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/759,023
Filing Date	01/20/2004
First Named Inventor	Clifton W. Bingham
Art Unit	2424 2129
Examiner Name	Omar Fernandez
Attorney Docket Number	MR1735-62

Sheet 1 of 4

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
OFR	A	US- 5,210,798	05/11/1993	Ekchain et al.	
OFR	B	US- 5,214,744	05/25/1993	Schweizer et al.	
OFR	C	US- 5,337,370	08/09/1994	Gilles et al.	
OFR	D	US- 5,465,308	11/07/1995	Hutcheson et al.	
OFR	E	US- 5,640,468	06/17/1997	Hsu	
OFR	F	US- 5,680,481	10/21/1997	Prasad et al.	
OFR	G	US- 5,751,844	05/12/1998	Bolin et al.	
OFR	H	US- 5,761,383	06/02/1998	Engel et al.	
OFR	I	US- 5,845,048	12/01/1998	Masumoto	
OFR	J	US- 5,867,386	02/02/1999	Hoffberg et al.	
OFR	K	US- 5,884,296	03/16/1999	Nakamura et al.	
OFR	L	US- 6,035,057	03/07/2000	Hoffman	
OFR	M	US- 6,038,337	03/14/2000	Lawrence et al.	
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OFR	O	US- 6,075,884	06/13/2000	Lubin et al.	
OFR	P	US- 6,104,835	08/15/2000	Han	
OFR	Q	US- 6,112,195	08/29/2000	Burges	
OFR	R	US- 6,122,399	09/19/2000	Moed	
OFR	S	US- 6,134,344	10/17/2000	Burges	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>4</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner  
Signature*Omar Fernandez*Date  
Considered

3-27-06

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

Sheet 2

of 4

Attorney Docket Number

**Complete if Known**

Application Number	10/759.023
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Filing Date	01/20/2004
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First Named Inventor	Clifton W. Bingham
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Art Unit	<del>2121</del> 2129
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Examiner Name	Omar fernández
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Attorney Docket Number	MR1735-62
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## U. S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner  
Signature**

Umar Faruk Nisar

Date  
Considered

3-27-06

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		Application Number	10/759,023
		Filing Date	01/20/2004
		First Named Inventor	Clifton W. Bingham
		Art Unit	2421 2129
		Examiner Name	Omar Fernandez
Sheet 3	of 4	Attorney Docket Number	MR1735-62

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
OPR	A1	S. Fahlman, "Fast-learning variations on back-propagation: An empirical study," in "Proceedings of the 1988 Connectionist Models Summer School", 1988, pp. 38-51.	
OPR	B1	M. Bao, "Backscattering change detection in SAR images using wavelet techniques," in "Proceedings of the 1999 IEEE International Geoscience and Remote Sensing Symposium (IGARSS'99)," June 28 - July 2 1999, pp. 1561-1563.	
OPR	C1	L. Bruzzone, et al. "A bayesian approach to automatic change detection," in "Proceedings of the 1999 IEEE International Geoscience and Remote Sensing Symposium (IGARSS'99)," June 28 - July 2 1999, pp. 1816-1818.	
OPR	D1	Lorenzo Bruzzone, "Automatic analysis of the difference image for unsupervised change detection," "IEEE Transactions on Geoscience and Remote Sensing," vol. 38, no. 3, pp. 1171-1182, May 2000.	
OPR	E1	M.J. Carlotto, "Detection and analysis of change in remotely -sensed imagery with application to wide area surveillance," "IEEE Transactions on Image Processing," vol. 6, no.1, Jan. 1997.	
OPR	F1	C. Canus, et al. "Change detection in sequences of images by multifractal analysis," in "Proceedings of the 1996 IEEE International Conference of Acoustics, Speech, and Signal Processing (ICASSP-96)," vol. 4, May 7-10 1996, pp. 2172-2175.	
OPR	G1	P. J. Deer, "Digital change detection techniques: Civilian and military applications," in "ISSSR-95", 1995. [Online]. Available; <a href="http://ftpwww.gsfc.nasa.gov/ISSSR-95/digitalc.htm">http://ftpwww.gsfc.nasa.gov/ISSSR-95/digitalc.htm</a>	
OPR	H1	X.Dai, et al. "Development of a new automated land cover change detection system from remotely sensed imagery based on artificial neural networks," in "Proceedings of the 1997 IEEE International Geoscience and Remote Sensing Symposium (IGARSS'97)," vol. 2, Singapore, Aug. 3-8 1997, pp. 1029-1031.	
OPR	I1	X. Dia, "Effects of image misregistraion on the accuracy of remotely sensed change detection," "IEEE Transactions of Geoscience and Remote Sensing, vol. 36, no. 5, pp.1566-1577, Sep. 1998.	
OPR	J1	X. Dia, "Requirements and techniques for an automated change detection system," in "Proceedings of the 1998 IEEE International Geoscience and Remote Sensing Symposium (IGARSS'98)," vol. 5, July 6-10 1998, pp. 2752-2754.	

Examiner Signature	Omar Fernandez	Date Considered	3-27-06
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	<b>First Named Inventor</b>	Clifton W. Bingham
	<b>Art Unit</b>	2421 2129
	<b>Examiner Name</b>	Omara Fernandez
<b>Sheet</b> 4 <b>of</b> 4	<b>Attorney Docket Number</b>	MR1735-62

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
OFN	K1	X. Dai, et al. "Automated image registration for change detection from Landsat thematic mapper imagery," in "Proceedings of the 1996 IEEE International Geoscience and Remote Sensing Symposium (IGARSS'96)," vol. 3, May 27-31 1996, pp. 1609-1611.	
OFN	L1	S. Gopal, et al. "Remote sensing of forest change using artificial neural networks," "IEEE Transactions of Geoscience and Remote Sensing," vol.34, no. 2, pp. 398-404, Mar. 1996.	
OFN	M1	H. Hanaizumi, et al. "Change detection from remotely sensed multi-temporal images using multiple regression," in "Proceedings of the 1992 IEEE International Geoscience and Remote Sensing Symposium (IGARSS'92)," May 26-29 1992, pp. 564-566.	
OFN	N1	R. L. Lillestrand, "Techniques for change detection," "IEEE Transactions on Computers," vol. 21, no.7, pp. 654-659, July 1972.	
OFN	O1	J. T. Morissette, et al. "An introduction of using generalized linear models to enhance satellite-based change detection," in "Proceedings of the 1997 IEEE International Geoscience and Remote Sensing Symposium (IGARSS'97)," vol. 4, Singapore, Aug. 3-8 1997, pp. 1769-1771.	
OFN	P1	I. Niemeyer, et al. "Unsupervised change detection techniques using multispectral satellite images," in "Proceedings of the 1999 IEEE International Geoscience and Remote Sensing Symposium (IGARSS'99), June 28 - July 2 1999, pp. 327-329.	
OFN	Q1	V.K. Shettigara, "A generalized procedure for change detection and semi-automatic extraction of man-made objects from multispectral images," in "ISSR-95." [Online]. Available: <a href="http://ftpwww.gsfc.nasa.gov/ISSR-95/ageneral.htm">http://ftpwww.gsfc.nasa.gov/ISSR-95/ageneral.htm</a>	
OFN	R1	D. J. Wehdahl, "Change detection in SAR images," in "Proceedings of the 1991 IEEE International Geoscience and Remote Sensing Symposium (IGARSS'91)," June 3-6 1991, pp. 1421-1424.	
OFN	S1	R. G. White, et al. "Change detection in SAR imagery," in "Proceedings of the 1990 IEEE International Geoscience and Remote Sensing Symposium (IGARSS'90)," May 7-9 1990, pp. 217-222.	
OFN	T1	T. Yamamoto, et al. "A change detection method for remotely sensed multi-spectral and multi-temporal images using 3-D segmentation," in "Proceedings of the 1999 IEEE International Geoscience and Remote Sensing Symposium (IGARSS'99)," June 28 - July 2 1999, pp. 77-79.	

<b>Examiner Signature</b>	Omara Fernandez	<b>Date Considered</b>	3-27-06
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